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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/401,937	09/23/1999	ROBERT A. HUME	CA9-99-002	5331

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EXAMINER	
ABELSON, RONALD B	

ART UNIT	PAPER NUMBER
2666	14

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/401,937	HUME ET AL.	
	Examiner	Art Unit	
	Ronald Abelson	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4 and 8-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,8-10,12-15,17 and 19-23* is/are rejected.

7)☒ Claim(s) *11,16 and 18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 September 1999* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 4, 8-10, 15, 17, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gossman (US 6,181,935) in view of Ebata (US 6,513,061).

Regarding claims 1, 4, 8, Gossman teaches a method and apparatus for a telephone system (fig. 6) of the common channel signaling and control type having signaling network means for handling switching and control signals (fig. 6 SS7) separate from voice signal (fig. 7 box 4), the signaling network means adapted to respond to and handle calls from wireless subscribers (fig. 6 box 1) pertaining to requests for services (fig. 6 box 9), the signaling network means including means for providing transaction signals (TCAP, col. 29 line 36) in response to calls to the telephone system by a wireless subscriber requesting service, the signaling network means further including a message server means (fig. 6 box 7).

The message server includes a means for creating message signals, which are compatible with the signaling network means (fig. 6 see IS-41 and SS7 or TCP/IP signaling between boxes 3 and 7) and service nodes (fig. 6 see TCP/IP signaling between boxes 7 and 9), in response to the transaction signals, the means for creating message signals not being comprised by a service node of the network.

The message server includes a message router means connected to said means for creating said message signals for routing said message signals to one or more interfaces for service nodes (fig. 6 see box 7 connected to a plurality of customer sites).

The message server includes a means for connecting the at least one service node of the subset of service nodes to process said message signals by (fig. 6 see connection from wireless site box 1 to SP Clients box 9 and SP Service Adjunct box 8).

The message server includes a node interface means for connecting the at least one service node to the message server means (fig. 6 see connection box 7 and 9) in order to provide service to the subscriber.

Although Gossman teaches multiple service nodes, the reference is silent on selecting a subset of the service nodes of the network through execution of a node reduction algorithm

in response to a request for service by a subscriber of the wireless subscribers, said subset of service nodes being limited to only those service nodes of the network which serve the subscriber's geographical area or logical telephone company area for services which the subscriber has subscribed.

Ebata teaches selecting a subset of the service nodes of the network through execution of a node reduction algorithm in response to a request for service by a subscriber of the wireless subscribers, said subset of service nodes being limited to only those service nodes of the network which serve the subscriber's geographical area or logical telephone company area for services which the subscriber has subscribed (most approximate proxy server, location of the client, col. 4 lines 57-65) and selecting at least one of the service nodes of the subset of the service nodes to process said message signals by performing arbitration and prioritization among the nodes (in consideration of the loads and the location of the client, col. 4 lines 59-62).

In addition, Ebata teaches, regarding claims 16 and 23, node interface adapted to assemble responses from applications provided by the service nodes, said node interface means further adapted to use said assembled responses to construct service lists for delivery to the message service means for performing

said arbitration (loads burdened on the network, col. 4 lines 57-62).

Therefore it would have been obvious to one of ordinary skill in the art, having both Gossman and Ebata before him/her and with the teachings [a] as shown by Gossman, a method to enable enhanced services of an intelligent telephone network in a wireless environment, and [b] as shown by Ebata, selecting a subset of the service nodes of the network through execution of a node reduction algorithm in response to a request for service by a subscriber of the wireless subscribers, said subset of service nodes being limited to only those service nodes of the network which serve the subscriber's geographical area or logical telephone company area for services which the subscriber has subscribed and selecting at least one of the service nodes of the subset of the service nodes to process said message signals by performing arbitration and prioritization among the nodes, to be motivated to modify the system of Gossman by upgrading the gateway server (fig. 6 box 7) with a DNS server (Ebata: col. 4 lines 57-65). The user could then provide the logical node name of the service requested. The server could then obtain the approximate location of the mobile from the source address of the transmitting base station. This would improve the system by providing a method for selecting a SP

client in the vicinity of the mobile user. This would provide fast and inexpensive access to a service node by the user.

Regarding claim 4, in addition to the limitations previously mentioned, Gossman teaches the signaling network means further includes a means for validating the wireless subscriber (fig. 6 IS-41). Note it is well known in the art that IS-41 provides a means for validating the wireless subscriber (Smith US 6,501,950: col. 3 lines 49-52).

Regarding claim 9, the step of creating, processing, and routing said message signals includes: sending and receiving said transaction signals to and from the signaling network and the message server means (fig. 6 see connection box 3 and 7), sending and receiving said message signals resulting from the transaction signals to and from an interface to the service node (fig. 6 see connection box 7 and 9), selecting a node interface from a plurality of node interfaces (limitation has previously been addressed in rejection to claims 1, 4, and 8), and communicating message signals to and from the node interface (fig. 6 see connection box 7 and 9).

Regarding claims 10 and 17, subset of the service nodes being limited to only those service nodes of the network that serve the subscriber's geographical area for services. This limitation has previously been addressed in rejection to claims 1, 4, and 8. See Ebata col. 4 lines 59-62.

Regarding claims 15 and 22, a transaction information manager at which transaction information is stored for later retrieval by an application of the selected at least one service node (fig. 6 box 3, TCAP, col. 29 line 36).

3. Claims 12-14 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Gossman and Ebata as applied to claim 1 above, and further in view of Hagirahim (US 6,449,284).

The combination is silent on a message service handler means containing a database to store pending queries.

Hagirahim teaches a message service handler means containing a database to store pending queries (col. 6 line 8).

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Gossman and Ebata and Hagirahim before him/her and with the teachings [a] as shown by the combination of Gossman and Ebata, a method to

enable enhanced services of an intelligent telephone network in a wireless environment, and [b] as shown by Hagirahim, a message service handler means containing a database to store pending queries, to be motivated to modify the system of the combination of Gossman and Ebata by upgrading the gateway server (Gossman: fig. 6 box 7) to contain a database. Installing a gateway server containing a database can perform this. This would improve the system by allowing the gateway server to store multiple service requests.

Allowable Subject Matter

4. Claims 11, 16, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 11 and 18, nothing in the prior art of the record teaches or fairly suggests serving the subscriber's logical telephone company area, in combination with all the other limitations listed in the claim (spec: pg. 11 lines 21-24). In contrast, Ebata teaches serving the geographic area.

Regarding claim 16, nothing in the prior art of the record teaches or fairly suggests interface adapted to assemble

responses from applications provided by the service nodes, said node interface means further adapted to use said assembled responses to construct service lists for delivery to the message service means for performing said arbitration, in combination with all the other limitations listed in the claim. In contrast, Ebata teaches the arbitration being performed in response to the clients.

Response to Arguments

5. Applicant's arguments with respect to amended claims 1, 8, & 9 have been considered but are moot in view of the new ground(s) of rejection. Examiner agrees with applicant's contention that the combination of Chen and Susai does not teach or suggest, "means for selecting a subset of service nodes of the network through execution of a node reduction algorithm" (applicant: pg. 12 3rd paragraph, pg. 13 3rd paragraph). Therefore, a new search was performed.

Applicant's arguments with respect to claim 4 have been considered but are moot in view of the new ground(s) of rejection. Applicant contends that the combination of Chen and Susai does not teach or suggest validating the wireless

subscriber (spec: pg. 14 last paragraph). The examiner has clarified this limitation in a new office action.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronald Abelson
Examiner
Art Unit 2666

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3/29/04

DANG TON
PRIMARY EXAMINER